Federal Communications Commission 445 12th St., S.W. Washington, D.C. 20554

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DA 20-68

Released: January 14, 2020

OFFICE OF ENGINEERING AND TECHNOLOGY SEEKS COMMENT ON VAYYAR IMAGING LTD. REQUEST FOR WAIVER OF SECTIONS 15.255(b)(2) AND 15.255(c)(3) OF THE COMMISSION'S RULES FOR RADARS USED FOR INTERACTIVE MOTION SENSING IN THE 57-64 GHZ BAND

ET Docket No. 20-15

Comment Date: February 3, 2020

Reply Comment Date: February 18, 2020

On November 13, 2019, Vayyar Imaging Ltd. ("Vayyar") filed a request for limited waiver of Sections 15.255(b)(2) and 15.255(c)(3) of the Commission's rules¹ to allow Vayyar to obtain a grant of equipment authorization for its V60G interactive motion sensing device ("V60G") in the 57-64 GHz band.² Vayyar states that the V60G is designed for a variety of 3D interactive motion-sensing applications such as touchless control, medical/safety alerts, vital sign monitoring, and environmental management.³

Vayyar claims that the V60G is an interactive motion sensing designed to operate under the same technical parameters as the Google Soli sensor for which the Commission previously granted a waiver.⁴ Vayyar requests that the Commission treat its device as such and waive Sections 15.255(b)(2) and 15.255(c)(3), the same two rules previously waived for Google.

Vayyar requests to operate its V60G device on-board aircraft without being a part of any on-board communication networks within the aircraft, and thus seeks a waiver of Section 15.255(b)(2)(ii), which requires that while airborne, devices may operate "only in closed exclusive on-board communication networks within the aircraft."⁵.

Vayyar also requests to operate its V60G device at the same limits as the Google Soli device, i.e., +10 dBm transmitter conducted output power, +20 dBm mean EIRP level, and +13 dBm/MHz mean power spectral density, and seeks a waiver of Section 15.255(c)(3) which requires short-range devices for interactive motion sensing to comply with a peak transmitter conducted output power limit of -10 dBm and a peak equivalent isotropically radiated power (EIRP) limit of +10 dBm.

¹ 47 CFR §§ 15.255(b)(2) and (c)(3), respectively.

² Vayyar Imaging Ltd. Request for Limited Waiver (*Request*), filed Nov 13, 2019.

³ *Id.* at 1.

⁴ Request at 1-2 (citing Google LLC Request for Waiver of Section 15.255(c)(3) of the Commission's Rules Applicable to Radars used for Short Range Interactive Motion Sensing in the 57 64 GHz Frequency Band, Order, DA 18-1308, 33 FCC Rcd 12542 (OET 2018). Google developed the Soli sensor to capture motion in a three-dimensional space using a radar beam, which enables persons to use gestures and motions to control a smartphone's functions or features. See www.google.com/soli.

⁵ 47 CFR § 15.255(b)(2).

In support of its request, Vayyar asserts that the V60G will generate an identical "spectrum footprint" as the Google Soli sensor and will coexist with other spectrum users in the 57-64 GHz band in the same manner as the Soli sensor. It asks us to evaluate the V60G based on a general interference simulation study that Google submitted in its waiver request.⁶

The Office of Engineering and Technology (OET) seeks comment on this waiver request. Although Vayyar asserts that its device is sufficiently similar to Google's device such that we should simply proceed to a final decision, we conclude that, given the relatively recent evolution of short-range interactive sensing technologies in the 57-64 GHz band that are the subject of Vayyar's request, the public interest is best served by first establishing a short pleading cycle for any interested parties to comment

To develop a complete record on the issues presented by this request, the proceeding will be treated, for *ex parte* purposes, as a "permit-but-disclose" in accordance with Section 1.1200(a) of the Commission's rules, subject to the requirements under Section 1.1206(b).

Vayyar submitted its request electronically through the Commission's Electronic Comment Filing System (ECFS) as a non-docketed filing in FCC INBOX-PART 15 (Petition for Waiver of Part 15). We have opened a new docket, ET Docket 20-15 to facilitate consideration of this request and have moved Vayyar's submission into this docket.⁷ Parties should file all comments and reply comments in ET Docket 20-15.

Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). See Electronic Filing of Documents in Rulemaking Proceedings, 63 FR 24121 (1998).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: http://apps.fcc.gov/ecfs/.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each
 filing. If more than one docket or rulemaking number appears in the caption of this proceeding,
 filers must submit two additional copies for each additional docket or rulemaking number.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.

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⁶ Request at 2. The Google simulation was filed March 7, 2018 in ET Docket No. 18-70.

U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.

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Parties should also send a copy of their filings to Anh T. Wride, Office of Engineering and Technology, Federal Communications Commission, Room 7-A363, 445 12th Street, S.W., Washington, D.C. 20554, or by e-mail to anh.wride@fcc.gov.

Documents are available for public inspection and copying during business hours at the FCC Reference Information Center, Portals II, 445 12th Street, S.W., Room CY-A257, Washington, D.C. 20554.

By the Chief, Office of Engineering and Technology

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